ABSTRACT OF THE DISCLOSURE

An apparatus for and a method of adaptive motion compensated de-interlacing of video data, in which one of a spatio-temporal method and a motion compensation method is adaptively selected according to a motion type. Motion vectors of a video field to be interpolated and an accuracy of the motion vectors are estimated using adjacent fields. An existence or non-existence of global motion is determined by analyzing the estimated motion vectors. Pixels generated according to a spatio-temporal interpolation method or pixels generated according to a motion compensated interpolation method are selected based on the accuracy of the estimated motion vectors and the existence or non-existence of global motion.